

## **Corps Facts** Dredge Goetz

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## **Mission**

The U.S. Army Corps of Engineers, St. Paul District, will use the Dredge William L. Goetz to help maintain 850 miles of the Upper Mississippi River, 335 miles of the Illinois River and other inland rivers, beginning in the spring of 2005. It will be used to dredge more than 2 million cubic yards of sediment out of the 9-foot navigation channel each year. It is replacing the 69-year-old Dredge William A. Thompson and is the Corps' newest and only major cutterhead style dredge.

The Dredge Goetz is one of three vessels that will make up the St. Paul District's new dredging fleet. A towboat, the General Warren, is expected to arrive in the district in early summer of 2006; and the quarters' barge, the Taggatz, is expected to arrive sometime during the 2007 navigation season, pending contract award.

## **History**

The Corps of Engineers commissioned the building of the Goetz in 2001 and awarded the contract in September of 2003. Rowan Electric, Inc., of Houston, which owns the design company Oilfield-Electric-Marine, also of Houston, and Le Tourneau Shipyard in Vicksburg, Miss., built the Goetz. After a 10-day maiden voyage up the Mississippi River, the Dredge Goetz arrived at its new home, the Corps' Fountain City Service Base in Fountain City, Wis., on May 15, 2005. Its christening ceremony is to be held June 24, 2005, at Winona, Minn.

The vessel cost \$9.8 million. It is named after William L. Goetz, a Corps' employee from 1957 until 1990. Goetz served as chief of the district's construction-operations division from 1970 until his retirement in 1990 and spent his entire career championing a reliable and efficient nine-foot channel system. Corps' employees named the dredge after Goetz as a testament to his dedication to the Corps of Engineers, the Upper Mississippi River and the nation.

## **Dredge Features**

The Dredge Goetz is 225-feet long, 40-feet wide and 600 tons. Its steel hull is 8-feet deep, and its draft is 5 feet. It can dredge a maximum of 1,000 cubic yards per hour up to 28 feet. It is powered by a 4,010 hp diesel engine. The Goetz has a 22-inch suction pipe diameter with a 20-inch discharge pipe diameter. It has 28-feet dredging depth capability and a 300-feet cut diameter. It is capable of pumping sand about 2 miles at 1,000 cubic yards per hour.

The Goetz makes use of new and innovative technology to make dredging safer, more efficient and better for the environment. The new towboat will have improved radar and more power than Dredge Thompson, thereby making it safer for employees. A new technology on the Goetz, called the "traveling spud," allows the dredge to be advanced with the aid of computer, rather than manually, into the material being dredged. This is expected to increase job production by up to 30 percent. Additionally, there are virtually no hydraulic systems onboard the Goetz that could leak into the river. AC motors driven by Caterpillar 3516B engines, and driven at a low speed of 1,200 rpm, will power the dredge pumps, winches, spud carriage and hoist. This should result in using less fuel, as well as a longer engine life.